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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,850	06/02/2004	Yu-Ren Peng	12971-US-PA	3849

31561 7590 01/05/2007

JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE
7 FLOOR-1, NO. 100
ROOSEVELT ROAD, SECTION 2
TAIPEI, 100
TAIWAN

EXAMINER	
HINES, ANNE M	
ART UNIT	PAPER NUMBER
2879	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/709,850	PENG ET AL.	
	Examiner	Art Unit	
	Anne M. Hines	2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 October 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02 June 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

The amendment filed on October 4, 2006, has been entered and acknowledged by the Examiner. The amendment to the claims is sufficient to overcome the objection to claim 10.

Claims 1-10 are pending in the instant application.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Liedenaum (WO 02/093537 A2).

Regarding claim 1, Liedenaum discloses an organic electro-luminescent device, comprising a first substrate (Figs. 1-2, 2; Page 6, line 22 to Page 7, line 6) having a first electrode layer (Figs. 1-2, 6; Page 6, line 22 to Page 7, line 6) and an organic functional layer sequentially disposed thereon (Figs. 1-2, 4; Page 6, line 22 to Page 7, line 6); a second substrate (Figs. 1-2, 1; Page 6, line 22 to Page 7, line 6) having a second

electrode layer disposed thereon (Figs. 1-2, 5; Page 6, line 22 to Page 7, line 6); and a conductive layer disposed between the organic functional layer and the second electrode layer (Figs. 1-2, 3; Page 6, line 22 to Page 7, line 6), wherein the second electrode layer is electrically connected the organic functional layer through the conductive layer.

Regarding claim 3, Liedenaum further discloses wherein the first electrode layer comprises a plurality of parallel-aligned first stripe electrodes and the second electrode layer comprises a plurality of parallel-aligned second stripe electrodes such that the first stripe electrodes extend in a direction perpendicular to the second stripe electrodes (Figs. 1-2, 5 & 6; Page 6, line 22 to Page 7, line 6).

Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Fukunaga et al. (US 6559594).

Regarding claim 1, Fukunaga discloses an organic electro-luminescent device, comprising a first substrate (Figs. 3A-3E, Figs. 4A-4D, 335; Column 8, line 60) having a first electrode layer (Figs. 3A-3E, Figs. 4A-4D, 333; Column 8, line 51) and an organic functional layer sequentially disposed thereon (Figs. 3A-3E, Figs. 4A-4D, 331; Column 8, line 8); a second substrate (Figs. 3A-3E, Figs. 4A-4D, 301; Column 8, line 61) having a second electrode layer disposed thereon (Figs. 3A-3E, Figs. 4A-4D, 321; Column 7, line 29); and a conductive layer disposed between the organic functional layer and the second electrode layer (Figs. 3A-3E, Figs. 4A-4D, 326; Column 7, line 41), wherein the

second electrode layer is electrically connected the organic functional layer through the conductive layer.

Regarding claim 4, Fukunaga further discloses wherein the conductive layer comprises an anisotropic conductive film (Figs. 3A-3E, Figs. 4A-4D, 326; Column 7, line 41).

Claims 1-2 and 5-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Lu et al. (US 2004/0245917).

Regarding claim 1, Lu discloses an organic electro-luminescent device, comprising a first substrate (Fig. 1, 20; Page 3, Paragraph [0062]) having a first electrode layer (Fig. 1, 30; Page 3, Paragraph [0062]) and an organic functional layer sequentially disposed thereon (Fig. 1, 60; Page 3, Paragraph [0062]); a second substrate (Fig. 1, 100 Page 3, Paragraph [0065]) having a second electrode layer disposed thereon (Fig. 1, 90; Page 3, Paragraph [0062]); and a conductive layer disposed between the organic functional layer and the second electrode layer (Fig. 1, 80; Page 3, Paragraph [0062]), wherein the second electrode layer is electrically connected the organic functional layer through the conductive layer.

Regarding claim 2, Lu further discloses wherein the first substrate is a substrate with an array of active devices thereon, the first electrode layer comprises a plurality of pixel electrodes and the second electrode layer serves as a common electrode (Page 4, Paragraph [0071]). Note that the Examiner considers that Lu's disclosure of the device as a television or computer display inherently discloses the claimed structure of an array

of active devices with pixel electrodes and a common electrode in order to operate the device as a television display since a television display requires an array of pixels that are separately addressable in order to function as a television.

Regarding claims 5 and 6, Lu further discloses wherein the first electrode layer comprises transparent indium tin oxide (Fig. 1, 30; Page 3, Paragraph [0062]; Page 4, Paragraph [0075]).

Regarding claims 7 and 8, Lu further discloses wherein the second electrode layer comprises transparent indium tin oxide (Fig. 1, 90; Page 3, Paragraph [0065]; Page 4, Paragraph [0075]).

Regarding claim 9, Lu further discloses wherein the device further comprises a low work function material layer disposed over the organic functional layer (Fig. 1, 70; Page 3, Paragraph [0066]).

Regarding claim 10, Lu further discloses wherein the material layer is calcium (Fig. 1, 70; Page 3, Paragraph [0066]).

Response to Arguments

Applicant's arguments filed October 4, 2006 have been fully considered but they are not persuasive.

With regard to claim 1, Applicant argues that the Liedenaum reference fails to disclose a first substrate having a first electrode layer and an organic functional layer

sequentially disposed thereon because the Liedenaum reference also has an insulating layer between the substrate and the electrode.

The Examiner respectfully disagrees. The claim language in claim 1, "a first substrate having a first electrode layer and an organic functional layer sequentially disposed thereon," does not require that the first electrode layer and organic functional layer, which are 'sequentially' layered on the substrate be directly on the substrate, only that they are on the substrate in the claimed sequence. Therefore, since Liedenaum discloses that the order of the electrode and organic functional layers on the first substrate is the same as that claimed, Liedenaum discloses the claimed invention.

With regard to claim 1, Applicant argues that the Fukunaga reference fails to disclose a first substrate having a first electrode layer and an organic functional layer sequentially disposed thereon because the Fukunaga reference discloses a passivation layer and a spacer interposed between the first electrode and first substrate. Applicant further argues that Fukunaga fails to disclose "connecting the organic functional layer and the second electrode layer " but instead discloses a conductive layer (326) used to connect the anode (329) and conductor (327).

The Examiner respectfully disagrees. The claim language in claim 1, "a first substrate having a first electrode layer and an organic functional layer sequentially disposed thereon," does not require that the first electrode layer and organic functional layer, which are 'sequentially' layered on the substrate be directly on the substrate, only that they are on the substrate in the claimed sequence. Therefore, since Fukunaga

discloses that the order of the electrode and organic functional layers on the first substrate is the same as that claimed, Fukunaga discloses the claimed invention. Further, claim 1 requires a second electrode and a conductive layer between the second electrode and organic functional layer such that the electrode and the functional layer are electrically connected through the conductive layer; this requirement is met by the structure of the device disclosed in Fukunaga since an electrode is defined as a conductor through which electricity enters or leaves something[1], and Fukunaga discloses an electrode (321) connected the TFT (402), an organic functional layer (331), and a conductive layer (326) between the electrode (321) and organic functional layer (331).

With regard to claim 1, Applicant argues that the Lu reference fails to disclose a second substrate, but instead discloses a cathode-capping layer made of a dielectric formed over the second electrode layer by sputtering.

The Examiner respectfully disagrees. Although Lu calls the second substrate a cathode-capping layer, the structure of the layer is within what the Examiner understands to be a substrate in that it is a protective layer of a dielectric material. Therefore, Lu discloses the structure claimed in claim 1.

[1] Compact Oxford English Dictionary: http://www.askoxford.com

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anne M. Hines whose telephone number is (571) 272-2285. The examiner can normally be reached on Monday through Friday from 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Anne M Hines
Patent Examiner
Art Unit 2879

MARICELI SANTIAGO
PRIMARY EXAMINER

12/26/08